English Translation of Japanese Patent Application No. 2004-201430 (filed on July 8, 2004)

[CLAIMS]

1. A high strength polyethylene multifilament according to claim 1, wherein said multifilament has a crystal size of monoclinic crystal of not larger than 9 nm.

2. The high strength polyethylene multifilament according to claim 1, wherein said multifilament has a ratio of the crystal sizes derived from the (200) and (020) diffractions of an orthorhombic crystal of from 0.8 inclusive to 1.2 inclusive.

3. The high strength polyethylene multifilament according to claim 1, wherein said multifilament has a stress Raman shift factor of not smaller than -5.0 cm^{-1}/(cN/dTex).

4. The high strength polyethylene multifilament according to claim 1, wherein said multifilament has an average strength of not lower than 20 cN/dTex.

5. The high strength polyethylene multifilament according to claim 1, wherein a knot strength retention of monofilaments constituting the high strength multifilament is not lower than 40%.

6. The high strength polyethylene multifilament according to claim 1, wherein CV which indicates a variation in the strengths of monofilaments constituting the high strength multifilament is not higher than 25%.

7. The high strength polyethylene multifilament according to claim 1, wherein said multifilament has an elongation at break of from 2.5% inclusive to 6.0% inclusive.

8. The high strength polyethylene multifilament according to claim 1, wherein each of filaments constituting the multifilament has a fineness of not higher than 10 dTex.

9. The high strength polyethylene multifilament according to claim 1, wherein the melting point of filaments is not lower than 145°C.